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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,966	01/12/2004	John Paul Helgeson	12854-41 (P03170US)	3588
757 7590 05/28/2008 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610				
EXAMINER				
IBRAHIM, MEDINA AHMED				
ART UNIT		PAPER NUMBER		
1638				
MAIL DATE		DELIVERY MODE		
05/28/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/755,966

Applicant(s)

HELGESON ET AL.

Examiner

MEDINA A. IBRAHIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-16, 19-26, 29-32, 38-45, 47-50, 66 and 67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-16, 19-26, 29-32, 38-45, 47-50, and 66-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1, 3-16, 19-26, 29-32, 38-45, 47-50, and 66-67 are pending and are examined. The indicated allowability of the claims has been withdrawn. This Office action contains new grounds of rejection, therefore is made Non-Final. Any inconvenience this may have caused Applicant is regretted.

Claims 1, 3-16, 19-26, 29-32, 38-45, 47-50, 66-67 are pending and are examined.

Priority

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/439, 376, filed 01/10/2003, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The nucleic acid sequences of SEQ ID NO: 4 and 7 and the polypeptide sequences of SEQ ID NO: 5 and 8 are not disclosed in the provisional application. The sequence search results of SEQ ID NO: 4-5 and 7-8 didn't reveal identical sequences in the provisional application 60/439,376. Therefore, the effective filing date of the instant application is considered to be 01/12/2004.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-16, 19-22, 24-26, 29-32, 38-41, 43-45, 47-50, and 66 are rejected under 35 U.S.C. 102(e) as being anticipated by Allefs et al (US 20030221215A1, published 11/27/2003).

3. The claims are drawn to an isolated nucleic acid having the sequence of SEQ ID NO: 4 or 7 or sequence thereof having at least 95% sequence identity and encoding a resistance polypeptide, a nucleic acid encoding a resistance polypeptide having at least 95% to SEQ ID NO: 5 or 8, a nucleic acid encoding a resistance polypeptide having at least 95% identity to, a recombinant expression cassette comprising said nucleic acid, transgenic plant/cell comprising said expression cassette; said plant is from *Solanum* species, said disease is caused by *phytophthora infestans* or Oomycete pathogen, and a method of enhancing disease resistance in a plant by transformation of the plant with said nucleic acid; said plant is tomato, potato or eggplant; said nucleic acid comprising a label.

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4. Allefs et al teach an isolated polynucleotide encoding a polypeptide that is 100% identical to Applicant's SEQ ID NO: 8, a recombinant vector and expression cassette comprising said polynucleotide, and a method for providing resistance against phytophthora infestans by transforming the plant with said polynucleotide; transgenic *Solanaceae* plants including potato, tomato and progeny thereof having resistance to phytophthora; said polynucleotide or a fragment thereof comprises an excisable label. Allefs et al also teach regenerating transformed plants including potato and tomato from transformed plant cells. Allefs et al further teach polynucleotide sequences having 100% identity to Applicant's SEQ ID NO: 7 and 99.8% to Applicant's SEQ ID NO: 4 (see attached alignment of sequences). Therefore, Allefs et al teach all claim limitations.
5. Applicant may file a priority showing under 37CFR 41.202 (d). See MPEP section 2305 [R-4], Requiring a Priority Showing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Aleffs et al (US 20030221215A1, published 11/27/2003) in view of Staskawics et al (US 6,166,295 A).

6. Aleffs et al teach an isolated polynucleotide encoding a polypeptide that is 100% identical to Applicant's SEQ ID NO: 8, a recombinant vector and expression cassette comprising said polynucleotide, and a method of providing resistance against *Phytophthora infestans* by transforming the plant with said polynucleotide; transgenic *Solanaceae* plants including potato, tomato and progeny thereof having resistance to phytophthora; said polynucleotide or a fragment thereof comprises an excisable label. Aleffs et al also teach regenerating transformed plants including potato and tomato from transformed plant cells. Aleffs et al further teach polynucleotide sequences having 100% identity to Applicant's SEQ ID NO: 7 and 99.8% to Applicant's SEQ ID NO: 4 (see attached alignment of sequences). While Aleffs et al teach an isolated gene which comprises the promoter sequence of claims 23 and 42, Aleffs et al do not disclose the isolated promoter sequence of SEQ ID NO: 23. However, given the availability of the resistance gene, the level of skill in the art, and the importance of resistance gene promoters as known to one of ordinary skill in the art, one would have been motivated to isolate the promoter sequence of the available resistance gene for use in plant

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transformation vectors to control expression of transcribable DNA sequences with a reasonable expectation of success.

7. Aleffs et al do not teach a polynucleotide comprising the specific labels of claim

67. Staskawics et al teach that methods for labeling polynucleotides/probes and guidance in the choice of labels appropriate for various purposes are well known to those of skill in the art and can be found in standard books on molecular protocols such as Sambrook et al (1989) (see column 12). Therefore, one of ordinary skill in the art would have a reasonable expectation of success to use an isotope, a chromophore or biotin or similar excisable labels with their polynucleotide for any desired purpose without any unexpected results. Reasons for using labeled probes or polynucleotides are known to one of ordinary skill in the art and as set forth in Staskawics et al. Therefore, for all the reasons given above, the claimed invention as whole was a prima facie obvious.

8. Applicant may file a priority showing under 37CFR 41.202 (d). See MPEP section 2305 [R-4], Requiring a Priority Showing.

Remarks

No claim is allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is

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(571)272-0797. The examiner can normally be reached on M-TH 8:00 am to 5:30 PM, and every other Friday from 8:00 AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAI
5/13/2008

/Medina A. Ibrahim/
Primary Examiner, Art Unit 1638